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Proposal: CAN 87

19 September 1957

**STATEMENT OF WORK
ADDED FREQUENCY WORK ON 14-CHANNEL
DATA-REDUCTION EQUIPMENT**

The Contractor has had to supply added engineering, labor, facilities, and material to perform the following work, in addition to that previously proposed for the 14-Channel Data-Reduction System for use with System 4:

1. G-Rack Redesign.

The transport on the G-rack which plays back the special 1 mil base tape on 14-inch reels required additional design improvement. The stringent requirement for very precise tape guidance to handle the thin-base tape, coupled with the weight and size of the reels of tape, required additional study, resulting in the addition of stiffening members on the transport top-plate, improvements in the machining procedure for this plate, and the modification of the tape-guidance system.

A second major problem was occasioned by the large variation from channel to channel which was found to occur in the playback-head outputs. Thus, the equalization of each amplifier had to be tailored individually to each channel, requiring redesign of the equalizer to permit adjustment, and also requiring a lengthened alignment procedure.

Finally, the redesign of the playback-record amplifier was reflected in the redesign of the monitor unit for the G-rack. This required complete rewiring of the monitor unit, and the addition of a separate assembly at the rear of the monitor unit to house the bias circuits.

2. General System Modifications

Additional work was required to make the one-inch equipment compatible with modified C, F, and B racks which are used with the 14-channel equipment. Transients generated by the sequence control equipment required suppression by measures similar to those employed in the quarter-inch equipment.

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3. Manual Revision.

Extensive revision of the instruction guide was required to incorporate the engineering changes and modifications made to the equipment.

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